

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Claims 1-71 are canceled without prejudice or disclaimer.

Claims 72-122 are new.

Listing of Claims:

- 1.- 71. (Cancelled)
72. (New) A method of inducing proliferation of bone marrow cells, lymphoid lineage progenitor cells, or progeny thereof, comprising contacting said cells with Bv8, EG-VEGF, or a combination thereof.
73. (New) The method of claim 72, wherein said bone marrow cells are hematopoietic stem cells, myeloid progenitor cells, myeloid precursor cells, or neutrophils.
74. (New) The method of claim 72, wherein said progeny are lymphoid precursor cells or lymphocytes.
75. (New) The method of claim 74, wherein said progeny are B cells or T cells.
76. (New) The method of claim 75, wherein the T cells are CD4+ T cells.
77. (New) The method of claim 72, wherein said Bv8 comprises an amino acid sequence having at least 80% identity with an amino acid sequence of SEQ ID NO:2 or SEQ ID NO:4 and induces proliferation of endothelial cells.
78. (New) The method of claim 77, wherein the Bv8 comprises an amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:6.
79. (New) The method of claim 77, wherein the Bv8 is a native human Bv8 polypeptide.
80. (New) The method of claim 77, wherein the Bv8 binds heparin.

81. (New) The method of claim 77, wherein the Bv8 comprises a fusion polypeptide, a chimeric polypeptide, or an immunoadhesin.
82. (New) The method of claim 72, wherein the EG-VEGF comprises an amino acid sequence having at least 80% identity with amino acids 20-105 of SEQ ID NO:8 and induces proliferation of endothelial cells.
83. (New) The method of claim 82, wherein the EG-VEGF is a native human EG-VEGF polypeptide.
84. (New) The method of claim 82, wherein the EG-VEGF comprises SEQ ID NO:10 or amino acid residues 20-105 of SEQ ID NO:8.
85. (New) The method of claim 82, wherein the EG-VEGF comprises a fusion polypeptide, a chimeric polypeptide, or an immunoadhesin.
86. (New) A method for treating an immunodeficiency disorder in a mammal, comprising administering to said mammal Bv8, EG-VEGF, or a combination thereof.
87. (New) The method of claim 86, wherein the immunodeficiency disorder comprises a primary immunodeficiency disorder or a secondary immunodeficiency disorder.
88. (New) The method of claim 86, wherein the immunodeficiency disorder comprises lymphopenia, neutropenia, monocytopenia, or granulocytopenia.
89. (New) The method of claim 86, wherein the immunodeficiency disorder comprises a B lymphocyte disorder or a T lymphocyte disorder.
90. (New) The method of claim 86, wherein the immunodeficiency disorder is a condition associated with chemotherapy, an infectious disease, a bacterial infection, human immunodeficiency virus (HIV) infection, administration of an immunosuppressive agent, leukemia, myeloproliferative disorder, myelodysplastic disorder, or administration of radiation.

91. (New) The method of claim 90, wherein the chemotherapy comprises treatment with 5 fluorouracil, vincristine, cisplatin, oxoplatin, methotrexate, 3'-azido-3'-deoxythymidine, paclitaxel, doxorubicin, an anthracycline antibiotic, or mixtures thereof.
92. (New) The method of claim 90, wherein the immunosuppressive agent is a therapeutic agent having a primary or secondary immunosuppressive effect.
93. (New) The method of claim 86, wherein said Bv8 comprises an amino acid sequence having at least 80% identity with an amino acid sequence of SEQ ID NO:2 or SEQ ID NO:4 and induces proliferation of endothelial cells.
94. (New) The method of claim 93, wherein the Bv8 comprises an amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:6.
95. (New) The method of claim 93, wherein the Bv8 is a native human Bv8 polypeptide.
96. (New) The method of claim 93, wherein the Bv8 binds heparin.
97. (New) The method of claim 93, wherein the Bv8 comprises a fusion polypeptide, a chimeric polypeptide, or an immunoadhesin.
98. (New) The method of claim 86, wherein the EG-VEGF comprises an amino acid sequence having at least 80% identity with amino acids 20-105 of SEQ ID NO:8 and induces proliferation of endothelial cells.
99. (New) The method of claim 98, wherein the EG-VEGF is a native human EG-VEGF polypeptide.
100. (New) The method of claim 98, wherein the EG-VEGF comprises SEQ ID NO:10 or amino acid residues 20-105 of SEQ ID NO:8.
101. (New) The method of claim 98, wherein the EG-VEGF comprises a fusion polypeptide, a chimeric polypeptide, or an immunoadhesin.

102. (New) A method for treating an autoimmune disorder or a disorder associated with abnormal hematopoiesis in a mammal, comprising administering to said mammal a Bv8 antagonist, EG-VEGF antagonist, or combination thereof.
103. (New) The method of claim 102, wherein the disorder is a hematological disorder.
104. (New) The method of claim 103, wherein the hematological disorder is leukemia, myeloproliferative disorder, myelodysplastic disorder, lymphoproliferative disorder, or lymphodysplastic disorder.
105. (New) The method of claim 104, wherein the leukemia is acute myeloid leukemia, chronic myelogenous leukemia, or acute lymphoblastic leukemia.
106. (New) The method of claim 102, wherein the autoimmune disorder comprises inflammatory bowel disease, Crohn's disease, colitis, graft versus host disease, lupus, multiple sclerosis, myasthenia gravis, optic neuritis, psoriasis, rheumatoid arthritis, Graves Disease, autoimmune hepatitis, type I diabetes, or aplastic anemia.
107. (New) The method of claim 102, wherein said Bv8 comprises an amino acid sequence having at least 80% identity with an amino acid sequence of SEQ ID NO:2 or SEQ ID NO:4 and induces proliferation of endothelial cells.
108. (New) The method of claim 107, wherein the Bv8 comprises an amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:6.
109. (New) The method of claim 107, wherein the Bv8 is a native human Bv8 polypeptide.
110. (New) The method of claim 107, wherein the Bv8 binds heparin.
111. (New) The method of claim 107, wherein the Bv8 comprises a fusion polypeptide, a chimeric polypeptide, or an immunoadhesin.

112. (New) The method of claim 102, wherein the EG-VEGF comprises an amino acid sequence having at least 80% identity with amino acids 20-105 of SEQ ID NO:8 and induces proliferation of endothelial cells.
113. (New) The method of claim 112, wherein the EG-VEGF is a native human EG-VEGF polypeptide.
114. (New) The method of claim 112, wherein the EG-VEGF comprises SEQ ID NO:10 or amino acid residues 20-105 of SEQ ID NO:8.
115. (New) The method of claim 112, wherein the EG-VEGF comprises a fusion polypeptide, a chimeric polypeptide, or an immunoadhesin.
116. (New) The method of claim 102, wherein the antagonist is an antibody or fragment thereof, small molecule, soluble receptor, or oligonucleotide.
117. (New) The method of claim 116, wherein the antibody is polyclonal or monoclonal.
118. (New) The method of claim 116, wherein the antibody is humanized or chimeric.
119. (New) The method of claim 116, wherein the antibody is a Fab, Fab', F(ab')₂, or Fv fragment.
120. (New) The method of claim 116, wherein the soluble receptor is Bv8/EG-VEGF receptor-1 or Bv8/EG-VEGF receptor-2.
121. (New) An article of manufacture comprising:
a container;
a Bv8 antagonist, EG-VEGF antagonist, or combination thereof; and
instructions for using the Bv8 antagonist, EG-VEGF antagonist, or combination thereof to treat hematological disorders.
122. (New) An article of manufacture, comprising:
a container,

Bv8, EG-VEGF, or a combination thereof, and
instructions for using the Bv8, EG-VEGF, or combination thereof to treat an
immunological disorder or a condition associated with abnormal hematopoiesis.